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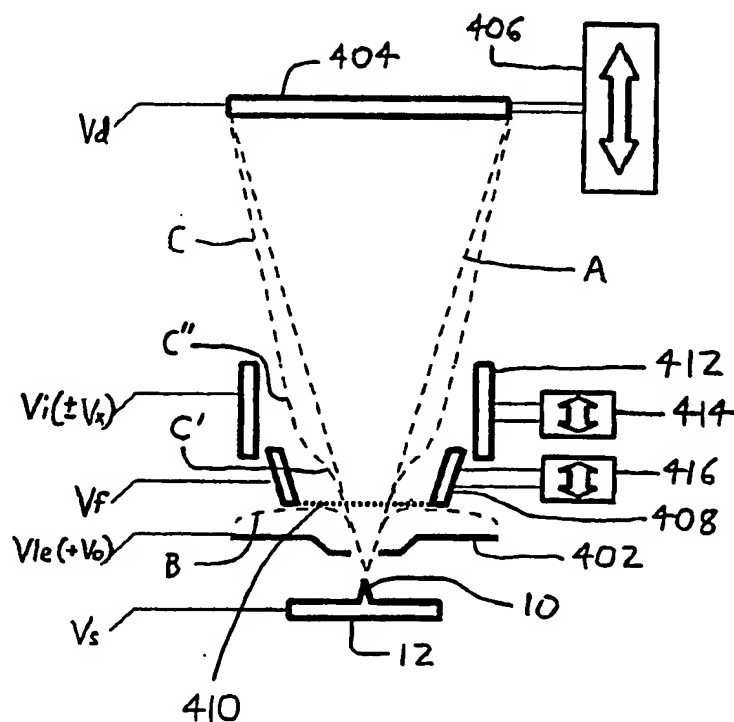
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(54) Title: **HIGH RESOLUTION ATOM PROBE**



(57) Abstract: An atom probe includes one or more intermediate electrodes between its local electrode and its detector, wherein the intermediate electrode(s) are charged to potentials such that they filter spurious ions and prevent them from reaching the detector, and/or adapt (focus) the flight cone of the ions to have a narrower or wider angle, thereby adjusting the magnification and field of view of the image provide by the atom probe. A preferred arrangement is to provide both filtering electrodes and focusing electrodes which are movable with respect to each other, and which may be telescopically interfit, so as to provide a range of filtering and focusing effects.



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